

DEPARTMENT OF VETERAN AFFAIRS AND AMERICAN PARKINSON DISEASE ASSOCIATION, INC.

Spring 2016

PARKINSON PRESS NEWSLETTER

 **Consider the environment. Print newsletter as necessary.**

Agent Orange Targets Dopamine Neurons *The Link Between Deployment in Viet Nam and Parkinson's disease*

John H. Peacock, M.D., Ph.D.

The medical column for this issue of the Parkinson Press was inspired by a report in *Neurology Today* that was based on an article in the journal, *Neurology*, in January 2016 (1). Briefly the article reported that Hawaiian men who had a daily consumption of two cups or more of milk prior to 1988 subsequently developed symptoms of dementia and memory loss. Postmortem examination of brain biopsies showed neuronal loss in the substantia nigra in a pattern similar to that found in Parkinson's disease (2).

Why milk? Prior to 1988 the chemical, heptachlor was used as a pesticide in Hawaiian pineapple fields. Pineapple by-products produced by harvesting and processing were added to cattle feed. Heptachlor is converted to heptachlor epoxide by animals and bacteria; this was found deposited in the brain biopsies. Importantly, there was up to a 40 percent decrease in nerve cell density in the substantia nigra. Recall that substantia nigra

In this Issue: April Awareness-Pages- 9, 10 & 12

Agent Orange Targets Dopamine Neurons: The Link Between Deployment in Vietnam and Parkinson's disease – Pages 1-3

Disclaimer & Veteran Update – Pages 4

Research Opportunities – Page 6

What's New & Optimism Walk– Page 6 & 11

Upcoming Events & Aces Ball game - Page-7&9

Nevada Support Group- Pages 7-8

neurons produce dopamine and that without sufficient dopamine, Parkinson's disease results.

On August 30, 2010 Veterans Affairs Secretary Eric K Shinseki (3) wrote that, "long overdue changes will as many as 150,000 Veterans to submit Agent Orange claims in the next 12 to 18 months." "Agent Orange was a blend of herbicides used by the U.S. military, during the Vietnam conflict, to deny concealment to enemy forces. More than 19 million gallons of herbicides were sprayed to remove foliage and undergrowth. The most common, Agent Orange, was sprayed in all four military zones of South Vietnam."

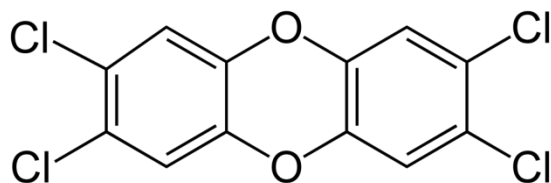
"Last October, based on the requirements of the Agent Orange Act of 1991 and the Institute of Medicine's report, Veterans and Agent Orange: Update 2008, I determined that the evidence provided was sufficient to support presumptions of service connection for three additional diseases: Parkinson's Disease, Hairy Cell and other Chronic B-Cell Leukemia, and Ischemic Heart Disease. After a public rulemaking process, we are now issuing a final regulation creating these new presumptions."



Retired U.S. Army General Eric K. Shinseki

Agent Orange Act of 1991 and the Institute of Medicine's report, Veterans and Agent Orange: Update 2008, was published as a book (4). The chapter on Neurological Diseases can be downloaded and includes a discussion on Parkinson's disease (beginning page 515) for those who want to go to the source materials.

What is Agent Orange? This is also called dioxin which is a shortened form of 2,3,7,8-tetrachlorodibenzo-p-dioxin or (TCDD). TCDD has the following biochemical structure taken from Wikipedia.



How does it work (5,6,7)? Toxins such as TCDD interact with an intracellular protein called the aromatic hydrocarbon or simply, the Ah receptor (AhR). Why is it called aromatic? Because it smells sweet, almost perfumed. Although the specific steps are less clear, AhR has a hormonal-like effect on the immune, reproductive, and endocrine systems, resulting in immunotoxicity, developmental toxicity, and cancer. Human and animal species react similarly but in varying degrees of severity.

Species showing high concentrations of AhR include rodents, rabbits, groundhogs, sheep, cats, ferrets, and others. Species with no detectable levels of AhR include Species that have been reported not to possess detectable levels frogs, cows, armyworms, turkeys, pigeons, and salmon.

Conclusion. This note focused on Agent Orange because of the singular importance to our veterans who served in Viet Nam with a resulting exposure to Agent Orange. However, the toxicity of Agent Orange is only one example of pesticides that can cause Parkinson's disease by reducing the number of neurons required for effective motor and non-motor function of the nervous system.

Bibliography

1. Samson K, Pesticide in milk may have caused PD-like damage. *Neurology today*. 2016 Jan 21;16(2)1,11.
2. Abbott RD, Ross GW, Petrovich KH, et al. Mid-life milk consumption and substantia nigra neuro density at death. *Neurology* 2015; Epub 2015 Dec.9.
3. Shinseki EK, Agent Orange and Veterans: a 40 year wait. August 30, 2010. Twitter Facebook email.
4. Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides (Seventh Biennial Update), Institute of Medicine. Veterans and Agent Orange, Update 2008. Chapter 8 Neurologic Disorders. pp. 510-544.
5. Birnbaum LS, The mechanism of dioxin toxicity: relationship to risk assessment. *Environ Health Perspect*. 1994 Nov; 102(Suppl 9): 157–167. PMID: PMC1566802.
6. Tian Y, Ke S, Denison MS, Rabson AB, Gallo MA. Ah receptor and NF-kB interactions, a potential mechanism for dioxin toxicity. *J. Biol. Chem*. Vol. 274, No. 1, Issue of January 1, pp. 510–515, 1999.
7. Landers JP and Bunce NJ. Review article. The Ah receptor and mechanism of dioxin toxicity. *Biochem. J.* (1991) 276, 273-287.

Contact Information-Disclaimer

APDA Dedicated Veterans Information and Referral Center**975 Kirman Avenue****Reno, NV 89502-0993**

Telephone: 775-328-1715

Toll Free: 888-838-6256 ext 1715

Fax: 775-328-1816

Internet Site: www.reno.va.gov/parkinsons/parkinsons.aspIntranet Site: www.reno.va.gov/parkinsons/parkinsons.aspEmail: Susan.Gulas@va.gov

Coordinator/Editor: Susan Gulas, RN, MSN

Medical Director: John Peacock, MD, PhD

APDA National Office

135 Parkinson Avenue

Staten Island, NY 10305-1425

Fax: 1-718-981-4399 Telephone: 718-981-8001 Toll Free: 800-223-2732

Website: www.apdaparkinson.org**Disclaimer:**

The material in this newsletter is presented solely for the information of the reader. It is not intended for treatment purposes, but rather for discussion with the patient's physician.



Veteran Update



Did you know VA provides [burial and memorial services](#) for Veterans, their spouse and other eligible family members? These services are provided at VA national cemeteries to ease families through the loss of their loved one at no cost. Some benefits are available for Veterans who choose burial in a private cemetery.

Click below to [Explore VA](#) and learn about benefits including burial in a VA national, state Veterans, or tribal cemetery; headstone, markers and medallions; burial flags, Presidential Memorial Certificates and more.

- [Watch this video](#) to learn about the services Veterans' family members may be eligible for as well.
- [Learn how](#) VA burial and memorial benefits can save families thousands of dollars and offer comfort in knowing their loved one's gravesite will be cared for forever.
- [Explore VA](#) memorial benefits and [find a VA national cemetery](#) near you.

RESEARCH OPPORTUNITIES

If you are interested in current research regarding Parkinson's disease, please visit one or all of the sites listed below.

Fox Trial Finder www.foxtrialfinder.org

Clinical Trials www.ClinicalTrials.gov

Center Watch www.centerwatch.com



It begins with you.

Study volunteers are essential to the advancement of medicine.



Participating in a clinical trial may help with your condition and help countless others who are fighting illness -- even when you participate as a healthy volunteer.



Finding a clinical trial can be confusing, so it's our pleasure to help. Our free Search Clinical Trials service is designed to help people find clinical trials that are relevant to their needs.

Click the button below to learn more.



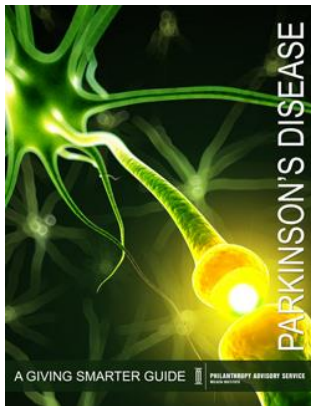
Research and healthcare professionals: Refer your patients to searchclinicaltrials.org

for personal, customized support in finding relevant clinical trials in their area.

For more information about CISCRP and the many programs and resources we offer, please visit www.ciscrp.org.

What's New???

A Giving Smarter Guide to Parkinson's Research, from the Milken Institute



As our population ages, the social and economic challenges of Parkinson's will continue to grow. The current estimated annual cost of PD is a staggering \$14.4 billion, which is projected to double by 2040. But our contributions to research can make a difference! The Milken Institute Philanthropy Advisory Service has developed a new guide to empower patients, supporters, and stakeholders to make strategic and informed decisions when directing their philanthropic investments into Parkinson's research and development efforts. [Download the free guide](#) to find opportunities and research solutions aligned with your interests.

Apple Inc.'s Research Kit Enables iPhone Parkinson's Disease Study To Release Treasure Trove Of Data

Can the iPhone cure disease? That's the hope behind a landmark study of Parkinson's disease released Thursday that used Apple's iPhone to track the progression of the disease among 9,500 people - without the researchers ever seeing a patient in person.

[Click here to continue...](#) From Northwest Parkinson's Foundation Archives 3/15/16

Upcoming Educational Events

4th World Parkinson Congress, Oregon Convention Center, Portland, Oregon, USA, September 20-23, 2016. Contact www.WPC2016.org

Northern Nevada Support Group

Contact information: 775-328-1715 or 888-838-6256 ext. 1715

Website: www.reno.va.gov/parkinsons/parkinsons.asp

| Spanish Springs | April 6 | May 4 | June1 |
|--|----------------|-----------------|------------------------|
| First Wednesday | TBA | Cynthia Chorjel | Dawn Currie D.Ph. |
| 10:00 am | | Equipment & PD | Medications used in PD |
| Cascades of the Sierra, 275 Neighborhood Way, 2 nd floor Great Room | | | |

| Carson City | April 12 | May 10 | June 14 |
|--|------------------|---------------|---------------------|
| Second Tuesday | Hope Williams | Kathy Hanson | Tracie Pistone |
| 2:00 pm | NV Talking Books | RSVP | Interim health Care |
| Carson City Senior Center, 911 Beverly Drive, lower level Tahoe Room | | | |

| Reno | April 8 | May 13 | June10 |
|--|-------------------------|---|----------------------|
| Second Friday | Governor's Proclamation | Susan Neeley RN | Valerie Williams PhD |
| 2:00 pm | April PD Awareness | Preparing for your Doctor's Appointment | Memory & PD |
| Atria at Summit Ridge, 4880 Summit Ridge Drive, Main Dining Room | | | |

| Reno | April 19 | May 17 | June21 |
|--|---------------------------------|---------------|--------------------|
| Third Tuesday | Kelly Cramond PhD | Cancelled | Tammy Malley |
| 5:00pm | Anxiety, Fatigue, & Sleep in PD | Cancelled | Gentiva LSVT "BIG" |
| Veterans Administration Medical Center, 975 Kirman Ave, Meet in Kirman Lobby | | | |

| Sparks | April 28 | May 26 | June 23 |
|---|-----------------|-----------------|----------------|
| Fourth Thursday | TBA | Tricia Starbuck | Jeff Dold |
| 2:30 pm | | Right At Home | More To Life |
| Morning Star Senior Living, 2360 Wingfield Hills Drive, Sparks, NV, 2 nd floor | | | |

| Reno | April 21 | May 19 | June 16 |
|--|-----------------|-------------------|--------------------|
| Third Thursday | Danae Miller | Karen Knorr | Ruth Simonis |
| 2:00pm | Massage Therapy | Home Care Options | Advanced Directors |
| Five Star Premier Residences of Reno, 3201 Plumas Street, Reno, NV | | | |

| Elko-Las Vegas-Reno | April 1 | May 6 | June 3 |
|---|--|------------------|---------------------|
| First Friday | Susan Gulas | Vicki Salazar | Denise Hund |
| 1:00 pm | Parkinson's disease, What I Need To Know | Access to Health | Alzheimer's Disease |
| University of Nevada Cooperative Extension, 4955 Energy Way. Reno, NV University of Nevada Elko, 701 Walnut Street, Elko, NV | | | |

Bowling Group:

Join the Parkinson's disease bowling group each Thursday @ 11:30am at High Sierra Lanes on South Virginia & Moana Street. Please call the APDA I&R Center @ 775-328-1715 for further information.

VAMC Los Angeles PADRECC Veterans Telephonic Support Group

Join us ~2 min. prior to the hour on the 2nd Tuesday of each month

1-800-767-1750, Access code 54321#

Virginia Janovsky, MN, MS, RN-BC

Clinical Coordinator/Research Study Coordinator

Southwest Parkinson's Disease Research, Education and Clinical Center

Veterans Affairs-Greater Los Angeles Healthcare System

(310) 478-3711, x4804



Parkinson's Day at the Aces Greater Nevada Ball Park is April 14, 2016. Meet outside the Ball Park at the American Parkinson Disease Association table to exchange your voucher for a ticket. The game starts at 12:05pm and the Aces are playing the Albuquerque Isotopes. Gates will open at 11:05pm. Make sure you arrive by 11:00am to exchange your voucher for a ticket.

Please contact Susan Gulas at 775-328-1715 for a \$14.00 voucher for the game. Vouchers need to be purchased by April 1, 2016 and money/checks need received by April 1, 2016. Proceeds from our ticket sales will benefit Parkinson's disease. We have reserved handicap seating in left field.

I'll see you at the Ballpark!



Contact: Susan Gulas RN, MSN, I&R Center Coordinator
775-328-1715
susan.gulas@va.gov

THE AMERICAN PARKINSON DISEASE ASSOCIATION LAUNCHES CAMPAIGN FOR APRIL AWARENESS MONTH

Get Your APDA Red Button and Help Raise Parkinson's Awareness

Reno, Nevada March 28, 2016 -- April is Parkinson's disease Awareness Month and the Nevada Information and Referral Center of the American Parkinson Disease Association (APDA) is hard at work to raise awareness of Parkinson's disease (PD) and help local residents support a cause that is important to them. In **Nevada alone, 11,000 to 12,000** thousand people over the age of 60 are diagnosed and living with Parkinson's disease. The Nevada Information & Referral Center has a full roster of activities planned for the month and many ways for people to get involved.

Across the country, APDA is launching its brand new **APDA Red Button campaign** that will bring to light to how basic everyday tasks (such as buttoning a shirt) become increasingly difficult for people with

Parkinson's disease (PD) and focus on health and wellness for those living with PD and their care partners. A red button will serve as APDA's unique symbol for the month and supporters can visit www.apdaparkinson.org to get their own virtual red button and share buttons with others. Throughout the month, the [APDA website](http://www.apdaparkinson.org), [apdaparkinson.org](http://www.apdaparkinson.org), will feature a new action each day for those who want to make a positive impact on the lives of those who battle this disease.

Locally, the Nevada Information & Referral Center will join **Governor, Brian Sandoval** in proclaiming April Parkinson's Disease Awareness Month at **Atria Senior Living, 4880 Summit Ridge Drive on April 8, 2016 from 2:00-3:00pm.** Governor Sandoval and Lisa Howard, Director of VA Sierra Nevada Health Care System, will recognize the APDA's efforts in providing information, referrals, patient and family support and education, and funding ongoing research.

In addition to the proclamation, APDA's **Nevada Information & Referral Center** will host an Optimism Walk at **Virginia Lake Park on June 11, 2016** for all residents of **Reno & Northern Nevada** to learn more about Parkinson's disease and how they can help.

"Every nine minutes there is a new diagnosis of PD, which means that in April alone nearly 5,000 people in this country will learn they have PD," states Nevada's Information & Referral Center Medical Director, Dr. John Peacock. "Parkinson's disease is a chronic, progressive disease with no treatment, therapy, or drug to slow or halt its progression. APDA is working tirelessly to support those living with PD now, and fund critical research to help put an end to this disease. "

For more than 50 years, APDA has led the charge as the nation's largest grassroots organization serving the needs of those touched by Parkinson's. The support of the general public is crucial and April is the perfect time to take action that can help the more than one million people in the United States coping with this neurological movement disorder and also fund research that will lead us to a cure.

[American Parkinson Disease Association \(APDA\)](http://www.apdaparkinson.org) was founded in 1961 with the dual purpose to *Ease the Burden - Find the Cure* for Parkinson's disease. In that time, APDA has raised and invested more than \$87 million to fund research, patient services and education, and elevate public awareness. As the country's largest Parkinson's grassroots organization, APDA is here to serve the more than one million Americans with Parkinson's disease and their families through a nationwide network of Chapters, Information and Referral (I&R) Centers, and support groups. APDA also funds Centers for Advanced Research and awards grants to fund the most promising research toward discovering the cause(s) and finding the cure for Parkinson's disease.

###



American Parkinson's Disease Association

Optimism Walks for Research

The Reno, Nevada Walk-a-thon will be held at Virginia Lake Park, 1980 Lakeside Drive on June 11, 2016 with registration starting at 9:00am.

The **Optimism Walks** begins at 9:30am and finishes at approximately 1:00pm.

Your \$25.00 Registration Fee gives you 1-t-shirt and 1 ticket for our community donated prizes. Organize a team of walkers or walk as an individual.

Please contact Susan Gulas at 775-328-1715 or email Susan.Gulas@va.gov for more information.

Community Sponsors for 2016 Optimism Walk for Research Partial Listing

Cascades of the Sierra
Five Star Premier Residences of Reno
The Continuum
Morning Star Senior Living
Right At Home

Harrah Automobile Foundation
Ruby River Steakhouse
Red's old 395 Grill
Moana Nursery
Swire Coca Cola

pain stiffness
slowness tremors



balance
falling

APRIL

**is Parkinson's Disease
Awareness Month**



dementia



freezing

difficulty swallowing

For more information about Parkinson's disease call:



**AMERICAN PARKINSON
DISEASE ASSOCIATION**
at: **1-800-223-2732**

or call your local APDA representative at: 775-328-1715

Nevada Governor Brian Sandoval presents Proclamation at Atria Senior

Living, 4880 Summit Ridge Dr., April 8, 2016 2:00pm-3:00pm

You're invited to the celebration!

or visit our Web site: www.apdaparkinson.org

Ease The Burden - Find The Cure

